

Title (en)  
CERAMIC FILTER UNIT FOR WATER TREATMENT

Title (de)  
KERAMISCHE FILTEREINHEIT ZUR WASSERBEHANDLUNG

Title (fr)  
UNITÉ DE FILTRES CÉRAMIQUE POUR TRAITEMENT DE L'EAU

Publication  
**EP 3808708 A4 20210811 (EN)**

Application  
**EP 19820402 A 20190612**

Priority  
• JP 2018111708 A 20180612  
• JP 2019023336 W 20190612

Abstract (en)  
[origin: EP3808708A1] A water-treating ceramic filter unit comprising a filter having pluralities of flow paths partitioned by porous ceramic cell walls and plugs alternately sealing the one-side or other-side ends of the flow paths; a housing containing the filter such that water to be treated is supplied from one end of the filter, and that the treated water is discharged from the other end of the filter; and seal members disposed on the outer edge portions of both end surfaces of the filter for longitudinally sandwiching and fixing the filter to the housing; the maximum of a gap between a side surface of the filter and the housing being equal to or less than the equivalent diameter of the flow paths.

IPC 8 full level  
**C02F 1/28** (2006.01); **B01D 29/01** (2006.01); **B01D 61/04** (2006.01); **B01D 63/06** (2006.01); **B01J 20/28** (2006.01); **C02F 1/00** (2006.01); **C02F 1/44** (2006.01); **C04B 38/00** (2006.01); **C02F 103/08** (2006.01)

CPC (source: EP US)  
**B01D 29/01** (2013.01 - EP); **B01D 35/306** (2013.01 - US); **B01D 35/308** (2013.01 - US); **B01D 39/2075** (2013.01 - US); **B01D 61/04** (2013.01 - EP); **C02F 1/004** (2013.01 - EP US); **C02F 1/281** (2013.01 - EP); **C02F 1/441** (2013.01 - EP); **C04B 35/195** (2013.01 - EP); **C04B 35/6365** (2013.01 - EP); **C04B 38/0012** (2013.01 - EP); **B01D 63/066** (2013.01 - EP); **B01D 2201/184** (2013.01 - US); **B01D 2201/287** (2013.01 - US); **B01D 2201/302** (2013.01 - US); **B01D 2201/304** (2013.01 - US); **B01D 2201/347** (2013.01 - US); **B01D 2201/62** (2013.01 - EP US); **B01D 2239/1291** (2013.01 - US); **B01D 2311/04** (2013.01 - EP); **B01D 2311/2649** (2013.01 - EP); **B01D 2313/041** (2022.08 - EP US); **C02F 2103/08** (2013.01 - EP); **C02F 2201/004** (2013.01 - EP US); **C02F 2303/14** (2013.01 - US); **C04B 2111/00793** (2013.01 - EP); **C04B 2235/6021** (2013.01 - EP); **C04B 2235/612** (2013.01 - EP); **C04B 2235/6567** (2013.01 - EP)

C-Set (source: EP)  
1. **B01D 2311/04 + B01D 2311/2649**  
2. **C04B 38/0012 + C04B 26/04 + C04B 26/06 + C04B 26/10 + C04B 26/16 + C04B 26/20 + C04B 38/0045 + C04B 38/0058 + C04B 38/0074 + C04B 38/0625 + C04B 38/0645**  
3. **C04B 38/0012 + C04B 35/195 + C04B 38/0054 + C04B 38/0058 + C04B 38/0074 + C04B 38/0625 + C04B 38/0645**

Citation (search report)  
• [E] WO 2019151522 A1 20190808 - HITACHI METALS LTD [JP] & EP 3718974 A1 20201007 - HITACHI METALS LTD [JP]  
• [A] EP 1832327 A2 20070912 - NGK INSULATORS LTD [JP]  
• [A] WO 2007004261 A1 20070111 - NGK INSULATORS LTD [JP], et al  
• See references of WO 2019240191A1

Cited by  
SE2251389A1; SE546250C2; EP4378560A1; SE2251388A1; SE546249C2

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3808708 A1 20210421; EP 3808708 A4 20210811**; JP 7310810 B2 20230719; JP WO2019240191 A1 20210624; US 11819787 B2 20231121; US 2021252439 A1 20210819; WO 2019240191 A1 20191219

DOCDB simple family (application)  
**EP 19820402 A 20190612**; JP 2019023336 W 20190612; JP 2020525631 A 20190612; US 201916973549 A 20190612